# Appendix H

### 1.1.4 Excess Laboratory Chemicals and Laboratory Cleanouts

The Waste Management Group encourages you to periodically remove unwanted chemicals from your work area to maintain a safe and compliant workplace. It is of the utmost importance that if you intend to leave Berkeley Lab, you must determine the fate of any chemicals you leave behind [see RPM Section 1.19 (*Space Management*)]. Your division might have specific rules regarding remaining chemicals. However, abandoned chemicals present compliance and safety liabilities. If chemicals are left behind without proper documentation, significant costs will be charged to the division to characterize these items. To that end, we ask that you do the following:

1. Determine if any other researcher in your area wants the chemicals. If so, please transfer custody to them and update the Chemical Management System.
2. Using the Chemical Management System, compile a list of any **unused or surplus chemicals** (not stock solutions or experimental products) you wish to discard. The Chemical Management System can produce a list of chemicals by room number. This list can be downloaded into Excel. Highlight or note by other means any containers that you have verified are in your inventory and that you wish to remove from your work area.
3. Fax or e-mail this highlighted/annotated list to your WM generator assistant.
4. Your generator assistant will review the highlighted items. If the list is multiple-pages long, it may take several weeks to review it; however, we will periodically inform you of our progress.
5. Your generator assistant will inform you of all items that are hazardous. You will then be required to submit a Hazardous Waste Requisition for all hazardous waste items. The chemical, Chemical Abstracts Service (CAS) number, container size, and container weight can be cut and pasted into the hazardous waste electronic requisition. Other information, such as the amount of the chemical, Satellite Accumulation Area (SAA) location, SAA start date, etc., will need to be supplied by the waste generator.

This process will save time and effort if your lab cleanout is large. **Alternatively**, you may enter all items into the electronic or handwritten requisition if your lab cleanout is small.

Stock solutions, experimental products, and radioactive and mixed wastes must be listed in the appropriate requisition.

The purpose of this review is to **screen** out any **nonregulated** chemicals that can be thrown in the trash or disposed of via the sanitary sewer. The highlighted list is **not** meant to be a substitute for a **waste requisition**. The electronic requisition can be accessed at https://ehswprod.lbl.gov/shoebox/login.asp, or by clicking “Haz Waste Req” on the “Quick Links” section of the Waste Management Web page.

# Summary of Hazardous Waste Requirements

## Managing Hazardous Waste

### 1. Identify

If you don't know if a specific waste is hazardous, check label(s) or MSDS to determine if these criteria apply:

**Toxic:**

- carcinogen,
- bioaccumulative properties,
- waste containing heavy metals/organics
- waste oil

**Corrosive:**

- pH < 2 or >12.5

**Ignitable:**

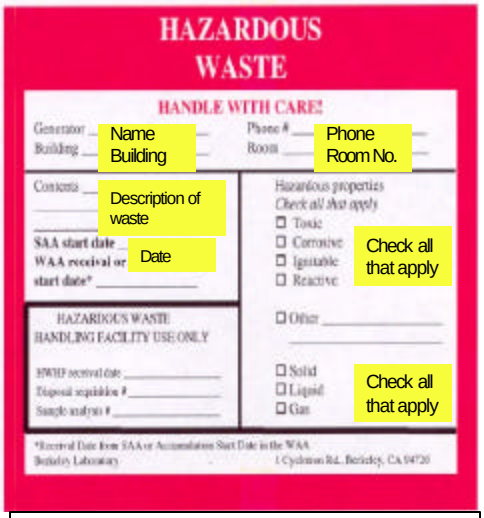
- Liquids with a flash point of <140?F (60?C)
- Solids that burn spontaneously
- Oxidizers

**Reactive:**

- Unstable material
- Explosives
- Water reactives
- Cyanide or sulfide-bearing wastes

### 2. Contain and Label

- Use compatible container




### 3. Accumulate

- Place in a designated satellite accumulation area (SAA)
- Segregate incompatible waste
- Provide secondary containment
- Keep containers closed except while adding waste
- Use an accumulation log

### 4. Dispose

- When container is full or SAA date ≥ 275 days, prepare a waste requisition and fax to x4838 with accumulation log(s)

OR electronically at
https://ehswprod.lbl.gov/shoebox/login.asp

Remove from CMS, if applicable.

Call your Generator Assistant with any questions _____
Name and Phone

## Appendix H

# Summary of Radioactive Waste Requirements

### Managing Radioactive Waste

**1. Identify**

- Segregate waste by physical form (solids vs. liquids)
- Collect long-lived isotopes separate from short-lived isotopes

**2. Accumulate**

- Use an accumulation log to record repetitive additions to the same waste container
- Collect within RMA
- Place liquids in adequate secondary containment.

***BERKELEY LAB***

***RADIOACTIVE/MIXED WASTE ACCUMULATION LOG***

*Container Description:* _____

| *Date Added* | *Description of What Was Added* | *Amount* | *Isotope* | *Activity* | *Initials* |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

**Radioactive Material Tag No. R**_____(*HWHF 6/14/04 NR*)

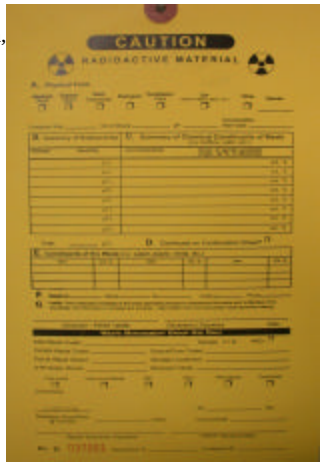
**3. Contain and Label**

- Complete the following sections of the Radioactive Material Tag and attach to the container

**A** (Physical Form, container size, start date)

**F** (all entries)

**G** ("Generator's Name")




**4. Dispose**

- Do not keep your radioactive waste over 1 year.
- Complete remaining sections, sign
- Fax to x4838 along with a Radioactive/Mixed Waste disposal requisition & appropriate accumulation log

# Summary of Mixed Waste Requirements

## Managing Mixed (Hazardous and Radioactive) Waste

### 1. Identify

- Segregate waste by physical form (solids vs. liquids)
- Collect long-lived isotopes separate from short-lived isotopes
- If you don't know if a specific waste is hazardous, check label(s) or MSDS to determine if these criteria apply:

**Toxic:**

- carcinogen,
- bioaccumulative properties,
- waste containing heavy metals/organics
- waste oil

**Corrosive:**

- pH <2 or >12.5

**Ignitable:**

- Liquids with a flash point of <140ºF (60ºC)
- Solids that burn spontaneously
- Oxidizers

**Reactive:**

- Unstable material
- Explosives
- Water reactives
- Cyanide or sulfide-bearing wastes

### 2. Accumulate

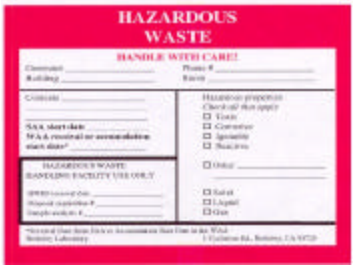
- Place in a designated satellite accumulation area (MWSAA) in your radioactive material area (RMA)
- Segregate incompatible waste
- Provide secondary containment
- Keep containers closed except while adding waste

### 3. Contain and Label

- Complete the following sections of the Radioactive Material Tag and attach to the container

  A (Physical Form, container size, start date); F (all entries); G ("Generator's Name")

- Complete a Hazardous Waste Label and attach to the container





### 4. Dispose

- Do not keep your mixed waste over 275 days.
- Complete remaining sections of the Rad Tag and sign
- Fax to x4838 along with a Radioactive/Mixed Waste disposal requisition/accumulation log(s)